



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------|------------------|
| 10/724,002 | 11/26/2003 | David Hoerl | 105479-58451 (644-036) | 7544 |
| 26345 7590 10/20/2008 | | | | |
| GIBBONS P.C. ONE GATEWAY CENTER NEWARK, NJ 07102 | | | | |
| EXAMINER | | | | |
| NGUYEN, THU HA T | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 2453 | | | | |
| NOTIFICATION DATE | | DELIVERY MODE | | |
| 10/20/2008 | | ELECTRONIC | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

thibbits@gibbonslaw.com
abriggs@gibbonslaw.com
IPDocket@gibbonslaw.com

Office Action Summary

Application No.

10/724,002

Applicant(s)

HOERL, DAVID

Examiner

THU HA T. NGUYEN

Art Unit

2453

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims **2-46** are presented for examination.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 24, 2008 has been entered.

Response to Arguments

3. Applicant's arguments filed July 24, 2008 have been fully considered but they are not persuasive because of the following reasons:
4. Applicant argues that Comstock fails to teach the remote management unit controls a power supply for each of the remote networking devices. In response to applicant's argument with respect to claim 4 have been considered but are moot in view of the new ground(s) of rejection in this Office action below.
5. Applicant argues that Comstock does not deal with the typical problems found in a KVM environment.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the typical problems found in a KVM environment) are not recited in

Art Unit: 2453

the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

6. Applicant argues that Comstock is not analogous to a KVM environment.

In response to applicant's argument that Comstock is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Comstock teaches the feature of controlling/managing media content by using policy manager 136 and using content digitizer to convert analog video signal into digital video signal (see Comstock par. 0035).

7. Applicant argues that Comstock does not teach or suggest the use of an LCD controller to convert analog video signals received from at least one of a plurality of remote networking devices to image correction processed digital video signals.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642

Art Unit: 2453

F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

8. Applicant argues that there is no disclosure with respect to video processing to improve switching from one remote computer to another.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., using video processing to improve switching from one remote computer to another) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

9. Applicant argues that Schneider does not generate image correction processed digital video signals let alone image correction processed digital video signals generated via an LCD controller.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Moreover, the examiner submits that Comstock does teach the feature of generated image correction processed digital video signals as shown in figure 2,

Art Unit: 2453

paragraphs 0030-0032, 0035-0034; and transmitting the image correction processed digital signals to the plurality of workstations as shown in figure 2, paragraph 0030-0033, 0035-0046.

However, **Comstock** does not explicitly teach a LCD controller converting analog video signals to digital video signals.

Schneider teaches a LCD controller includes video digitizer that receives and converts analog signals into digital signals (figure 1, col. 3, line 56-col. 4, line 17, col. 5, line 49-col. 6, line 38).

It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to modify the teachings of **Schneider** into **Comstock** system to include the controller because it would provide an efficient system for remotely accessing and controlling a remote located computer system using controller.

10. Therefore, the examiner asserts that cited prior art teaches or suggests the subject matter broadly recited in independent claims 2, 4 and 27. Claims 3, 5-26 and 28-46 are also rejected at least by virtue of their dependency on independent claims and by other reasons set forth in this action.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

Art Unit: 2453

be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 2-46 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over **Comstock et al.** (hereinafter Comstock) US. Pub. No. **2004/0083266**, in view of **Schneider et al** (hereinafter Schneider) U.S. Patent No. **6,539,418**.

13. As to claim 2, **Comstock** teaches the invention as claimed, including a system for improved video digitization and image correction, said system comprising:

a plurality of workstations coupled to a communications medium (figures 1-2);

a remote management unit coupled to said communications medium, said remote management unit including a digitizer converting analog video signals received from at least one of a plurality of remote networking devices to image correction processed digital video signals (figure 2, paragraphs 0030-0032, 0035-0034), the remote management unit including modules for processing and transmitting control signals to and from the plurality of workstations (figure 2, paragraphs 0012, 0035-0040) and transmitting the image correction processed digital signals to the plurality of workstations (figure 2, paragraph 0030-0033, 0035-0046).

Art Unit: 2453

Comstock teaches a digitizer converting analog video signals to digital video signals. However, **Comstock** does not explicitly teach a LCD controller converting analog video signals to digital video signals.

Schneider teaches a LCD controller includes video digitizer that receives and converts analog signals into digital signals (figure 1, col. 3, line 56-col. 4, line 17, col. 5, line 49-col. 6, line 38).

It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to modify the teachings of **Schneider** into **Comstock** system to include the controller because it would provide an efficient system for remotely accessing and controlling a remote located computer system using controller.

14. As to claim 3, **Comstock** teaches the invention as claimed, including the system according to claim 2, wherein each of said plurality of workstations is of a type comprising at least one keyboard, video monitor and cursor control device, and wherein each of said plurality of workstations is capable of accessing and operating said plurality of remote networking devices through said remote management unit (figures 1-2).

15. As to claim 4, **Comstock** teaches the invention as claimed, including a system for improved video digitization and image correction, said system comprising: a plurality of workstations coupled to a communications medium (figures 1-2);

a remote management unit coupled to said communications medium, said remote management unit including a video digitizer for converting analog video signals to digital video signals, said analog video signals received from at least one of a plurality of remote networking devices (figure 2, paragraphs 0030-0032, 0035-0034) the remote management unit including modules for processing and transmitting control signals to and from the plurality of workstations (figure 2, paragraphs 0012, 0035-0040); and an image correcting circuit for processing said digital video signals received from said digitizer (paragraphs 0035-0037, 0043-0046).

Comstock does not teach wherein said remote management unit controls a power supply for each of said remote networking devices.

Schneider teaches wherein said remote management unit controls a power supply for each of said remote networking devices (col. 17, line 20-31).

It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to modify the teachings of **Schneider** into **Comstock** system to include the remote management unit controls a power supply for each of said remote networking devices because it would provide an efficient system for remotely accessing and controlling a remote located computer system using controller.

16. As to claim 5, **Comstock** teaches the invention as claimed, including the system according to claim 2, wherein said communications medium is at least one selected from the group consisting of a LAN, a WAN, a wireless

Art Unit: 2453

connection, a modem, a direct modem connection, and the Internet (paragraphs 0020-0021).

17. As to claim 6, **Comstock** teaches the invention as claimed, including the system according to claim 2, wherein each of said plurality of remote networking devices is connected to said remote management unit through cabling via a port selected from the group consisting of a serial port, parallel port, keyboard port, video port, cursor control device port, USB port, firewire port, bluetooth port, Ethernet port, and a power supply port (figures 1-2, paragraphs 0020-0021).

18. As to claim 7, **Comstock** teaches the invention as claimed, including the system according to claim 2, wherein said remote management unit controls access by requiring identification data to authenticate a user (paragraph 0027).

19. As to claim 8, **Comstock** teaches the invention as claimed, including the system according to claim 2, wherein said remote management unit and said plurality of user workstations communicate via TCP/IP (paragraphs 0020-0023).

20. As to claim 9, **Comstock** teaches the invention as claimed, including the system according to claim 2, wherein said remote management unit

Art Unit: 2453

and said plurality of user workstations communicate via the Internet (figures 1-2, paragraphs 0020-0021).

21. As to claim 10, **Schneider** teaches the invention as claimed, including the system according to claim 2, wherein said LCD controller includes an analog to digital converter (figure 1, col. 5, line 49-col. 6, line 38).

22. As to claim 11, **Comstock** does not explicitly teach wherein said LCD controller includes an input interface circuit for detecting a color palette utilized by said remote network device.

However, **Schneider** teaches wherein said LCD controller includes an input interface circuit for detecting a color palette utilized by said remote network device (figure 1, col. 3, line 56-col. 4, line 17, col. 5, line 49-col. 6, line 38, col. 6, line 58-col. 7, line 27).

It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to modify the teachings of **Schneider** into **Comstock** system because it would provide an efficient system to perform lossless compression one the captured video information before transmission.

23. As to claim 12, **Schneider** teaches wherein said LCD controller includes a synchronization selector circuit for receiving horizontal and vertical synchronization signals (col. 9, line 50-col. 11, line 20, col. 15, line 66-col. 17, line 37).

24. As to claim 13, **Schneider** teaches wherein said LCD controller includes a mode detection circuit for receiving said synchronization signals from said synchronization selector circuit and for determining a frequency of said synchronization signals (col. 9, line 50-col. 11, line 20, col. 15, line 66-col. 17, line 37).

25. As to claim 14, **Schneider** teaches wherein said LCD controller includes an auto-adjustment circuit for performing at least one of active area detection, pixel brightness searching, pixel measurement and phase distortion measurement (col. 6, line 28-col. 8, line 42).

26. As to claim 15, **Schneider** teaches wherein said auto-adjustment circuit updates timing of a clock during said phase distortion measurement (col. 9, line 53-col. 11, line 20).

27. As to claim 16, **Schneider** teaches wherein said LCD controller includes a downscaler circuit for reducing high video resolution to low video resolution (col. 6, line 28-col. 8, line 42).

28. As to claim 17, **Schneider** teaches wherein said LCD controller includes an upscaler circuit for increasing low video resolution to high video resolution (col. 6, line 28-col. 8, line 42).

29. As to claim 18, **Schneider** teaches wherein said LCD controller includes an option menu circuit for enabling a user to select one of a plurality of serial devices, remote servers, remote computers or power devices (figure 1).

30. As to claim 19, **Schneider** teaches wherein said LCD controller modifies each pixel of said digital video signals according to a color palette (col. 6, line 28-col. 8, line 42).

31. As to claim 20, **Schneider** teaches wherein said LCD controller includes a dithering circuit for approximating a color for a pixel of said digital video signals (col. 6, line 28-col. 8, line 42).

32. As to claim 21, **Schneider** teaches wherein said LCD controller includes an output interface circuit for adjusting timing of said analog video signals (col. 9, line 53-col. 11, line 20).

33. As to claim 22, **Comstock** teaches the invention as claimed, including the system according to claim 2, wherein said remote management unit includes a video processor circuit for compressing said digital video signals (paragraphs 0038, 0065).

34. As to claim 23, **Schneider** teaches wherein said video processor circuit includes a pixel receiving circuit for receiving pixel information from said digital video signals (col. 6, line 28-col. 8, line 42).

35. As to claim 24, **Schneider** teaches wherein said video processor circuit includes a frame buffer circuit for storing said pixel information (col. 6, line 28-col. 8, line 42).

36. As to claim 25, **Comstock** teaches the invention as claimed, including the system according to claim 22, wherein said video processor circuit includes a video compression circuit (paragraphs 0038, 0065).

37. As to claim 26, **Comstock** teaches the invention as claimed, including the system according to claim 2, wherein said processing includes converting said digital video signals for compatibility with a video display of one of said plurality of workstations (figure 2, paragraphs 0030-0032, 0035-0034). **Comstock** does not explicitly teach a LCD controller. **Schneider** teaches a controller includes video digitizer that receives and converts analog signals into digital signals (figure 1, col. 3, line 56-col. 4, line 17, col. 5, line 49-col. 6, line 38). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to modify the teachings of **Schneider** into **Comstock** system to include the controller because it would provide an efficient

Art Unit: 2453

system for remotely accessing and controlling a remote located computer system using controller.

38. As to claim 27, **Comstock** teaches the invention as claimed, including a method for providing improved video digitization and image correction for the transmission of video signals, said method comprising the steps of:

receiving analog video signals and control signals from one of a plurality of remote devices connected to a remote management unit (figures 1-2, paragraphs 0012, 0034-0040);

using digitizer to converts said analog video signals to digital video signals (figure 2, paragraphs 0030-0032, 0035-0034) and corrects said digital video signals (figure 2, paragraphs 0030-0032, 0035-0034, 0043); and

transmitting said digital video signals and the control signals to one of a plurality of user interface devices (figures 1-2, paragraphs 0035-0046).

Comstock a digitizer converting analog video signals to digital video signals. However, **Comstock** does not explicitly teach a LCD controller.

Schneider teaches a LCD controller includes video digitizer that receives and converts analog signals into digital signals (figure 1, col. 3, line 56-col. 4, line 17, col. 5, line 49-col. 6, line 38). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to modify the teachings of **Schneider** into **Comstock** system to include the controller because it would provide an efficient system for remotely accessing and controlling a remote located computer system using controller.

39. As to claim 28, **Comstock** teaches the invention as claimed, including the method according to claim 27, wherein said user interface devices are accessible by inputting unique authentication information (paragraph 0027).

40. As to claim 29, **Comstock** teaches the invention as claimed, including the method according to claim 27, wherein said method further comprises the step of: displaying said digital video signals on a video display of one of said user interface devices (figure 2, paragraphs 0043-0046).

41. As to claim 30, **Comstock** teaches the invention as claimed, including the method according to claim 27, wherein said method further comprises the step of: compressing said digital video signals prior to said transmitting (paragraphs 0038, 0065).

42. As to claim 31, **Comstock** teaches the invention as claimed, including the method according to claim 30, wherein a compression algorithm is used to perform said compressing (paragraphs 0038, 0065).

43. As to claim 32, **Schneider** teaches wherein said compression algorithm determines noise in said digital video signals, smoothes said digital video signals, determines changes to pixels of said digital video signals, and compresses said changed digital video signals (col. 6, line 28-col. 8, line 42).

44. As to claim 33, **Comstock** teaches the invention as claimed, including the method according to claim 27, wherein said transmitting occurs via TCP/IP (paragraphs 0020-0022).

45. As to claim 34, **Schneider** teaches wherein said correcting comprises image correction (col. 6, line 58-col. 7, line 27).

46. As to claim 35, **Schneider** teaches wherein said image correction includes detecting a color palette of said digital video signals (col. 6, line 58-col. 7, line 27).

47. As to claim 36, **Schneider** teaches wherein said correcting includes receiving horizontal and vertical synchronization signals (col. 9, line 50-col. 11, line 20, col. 15, line 66-col. 17, line 37).

48. As to claim 37, **Schneider** teaches wherein said correcting includes determining one or more frequencies of said digital video signals (col. 9, line 50-col. 11, line 20, col. 15, line 66-col. 17, line 37).

49. As to claim 38, **Schneider** teaches wherein said correcting includes detecting an active area of a video image represented by said digital video signals (col. 9, line 50-col. 11, line 20, col. 15, line 66-col. 17, line 37).

50. As to claim 39, **Schneider** teaches wherein said correcting includes determining brightness of each pixel of said digital video signals (col. 6, line 28-col. 8, line 42).

51. As to claim 40, **Schneider** teaches wherein said correcting includes measuring phase distortion of said digital video signals (col. 6, line 28-col. 8, line 42).

52. As to claim 41, **Schneider** teaches wherein said correcting includes measuring one or more pixels of said digital video signals (col. 9, line 50-col. 11, line 20, col. 15, line 66-col. 17, line 37).

53. As to claim 42, **Schneider** teaches wherein said correcting includes reducing high video resolution to low video resolution (col. 9, line 50-col. 11, line 20, col. 15, line 66-col. 17, line 37).

54. As to claim 43, **Schneider** teaches wherein said correcting includes increasing low video resolution to high video resolution (col. 9, line 50-col. 11, line 20, col. 15, line 66-col. 17, line 37).

Art Unit: 2453

55. As to claim 44, **Schneider** teaches wherein said correcting includes dithering said digital video signals (col. 9, line 50-col. 11, line 20, col. 15, line 66-col. 17, line 37).

56. As to claim 45, **Schneider** teaches wherein said correcting includes adjusting timing of said digital video signals (. 9, line 53-col. 11, line 20).

57. As to claim 46, **Schneider** teaches wherein said method further comprises the step of: storing pixel information of digital video signals (col. 9, line 50-col. 11, line 20, col. 15, line 66-col. 17, line 37).

Conclusion

58. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

59. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Ha Nguyen, whose telephone number is (571) 272-3989. The examiner can normally be reached Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne, can be reached at (571) 272-4001.

The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information

Art Unit: 2453

for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/THUHA T. NGUYEN/

Primary Examiner, Art Unit 2453